

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Previously Presented) A storage area network (SAN), comprising:
a plurality of storage devices;
a plurality of digital data processors, each having a file system that effects access to one or more of the storage devices coupled to the SAN; and
a process in communication with the digital data processors, wherein the process responds to a notification from one of the digital data processors requesting extension of the file system at the requesting digital data processor in accordance with a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring the extension of the file system, and wherein the process adds storage to the file system of the requesting digital processor to implement the request for the extension of the file system according to the attributes in the at least one group of attributes associated with the requesting digital data processor.
2. (Previously Presented) The SAN of claim 1, wherein the groups of attributes include a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is associated with the first and second groups, and wherein the first group is further associated with at least one digital data processor other than the requesting digital data processor.
3. (Previously Presented) The SAN of claim 2, wherein
the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set, wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process

configures the file extension on behalf of the requesting digital data processor using the attributes in the policy defined for the second group.

4. (Previously Presented) The SAN of claim 2, wherein the attributes are a member of a set of configuration attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification.

5. (Canceled)

6. (Previously Presented) The SAN of claim 2, wherein a database coupled to the process stores the hierarchical arrangement of the groups of attributes.

7-15. (Canceled)

16. (Previously Presented) A method operating in a storage area network (SAN) comprising one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, comprising:

defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system;

assigning the digital data processors to the groups of attributes;

extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the at least one group of attributes associated with the requesting digital data processor.

17. (Canceled)

18. (Currently Amended) The method of claim ~~[[17]]~~ 16, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification.

19. (Previously Presented) The method of claim 21, wherein assigning the digital data processors to the groups further comprises assigning one of the digital data processors to the first group and to a third group hierarchically related to the second group at a lower level, the third group inheriting at least a portion of the policy defined for the second group and overriding the remainder of the policy.

20. (Previously Presented) The method of claim 21, wherein assigning the digital data processors to the groups further comprises assigning another one of the digital data processors to the first group and to a third group hierarchically at the same level as the second group, the third group inheriting at least a portion of the policy defined for the first group and overriding the remainder of the policy to define a file extension policy that is at least partially different from the policy defined for the second group.

21. (Previously Presented) The method of claim 16, wherein the groups of attributes include

a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the first group includes at least one digital data processor other than the requesting digital data processor.

22. (Previously Presented) The method of claim 16, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

23. (Previously Presented) The method of claim 22, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

24. (Previously Presented) The method of claim 16, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.

25. (Previously Presented) The method of claim 21, wherein the first group is associated with a first set of file extension attributes defining a default policy for digital data processors associated with that group and wherein the second group is associated with a second set of one or more file extension configuration attributes, wherein a definition of an attribute in the second set overrides a definition for that attribute in the first set, wherein the configuration attributes of the second set, taken in conjunction with non-overridden configuration attributes of the first set, define a policy for the second group, wherein the process configures the file extension on behalf of the requesting digital data processor using the attributes defined for the policy of the second group.

26. (Previously Presented) The SAN of claim 1, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

27. (Previously Presented) The SAN of claim 26, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

28. (Previously Presented) The SAN of claim 1, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.

29. (Previously Presented) A computer readable medium including a manager program in communication with one or more digital data processors and one or more storage devices, each having a file system that effects access to one or more of the storage devices, wherein the manager program is capable of causing operations, the operations comprising:

defining a hierarchically defined file extension policy, wherein the hierarchically defined extension policy indicates a hierarchical arrangement of groups of attributes for configuring an extension of the file system;

assigning the digital data processors to the groups of attributes; and

extending the file system of a digital data processor requesting an extension of the file system by adding storage to the file system of the requesting digital data processor according to the attributes in the group of attributes associated with the requesting digital data processor.

30. (Previously Presented) The computer readable medium of claim 29, wherein the attributes are a member of a set of attributes comprising: a utilization threshold above which file system extension is requested, one or more storage devices accessible for file system extension, a range of storage capacities for accessible storage devices to be assigned for file system extension, maximum file system size, a flag indicating whether file system utilization is monitored, and an alert interval for notifying a SAN administrator of a file system utilization exceeding a threshold since a previous notification.

31. (Previously Presented) The computer readable medium of claim 29, wherein the groups of attributes include:

a first group at a first hierarchical level and a second group at a second hierarchical level, wherein the first hierarchical level is hierarchically above the second hierarchical level, and wherein the requesting digital data processor is in the first and second groups, and wherein the

first group includes at least one digital data processor other than the requesting digital data processor.

32. (Previously Presented) The computer readable medium of claim 29, wherein digital data processors associated with one group of attributes are also associated with all groups of attributes at hierarchically higher levels than the group with which the digital data processor is associated.

33. (Currently Amended) The computer readable medium of claim ~~[[33]]~~ 32, wherein the attributes the process uses to configure the file extension for the requesting digital processor include attributes in the at least one group associated with the requesting digital processor, wherein a definition of one attribute at a lower hierarchical level is used over a definition of the attribute at one higher hierarchical levels.

34. (Previously Presented) The computer readable medium of claim 29, wherein at least one group comprises a host group policy defining attributes for configuring an extension to all file systems within each digital data processor associated with the host group policy, and wherein at least one group comprises a file system policy defining attributes for configuring a specified file system within each digital data processor associated with the file system policy.